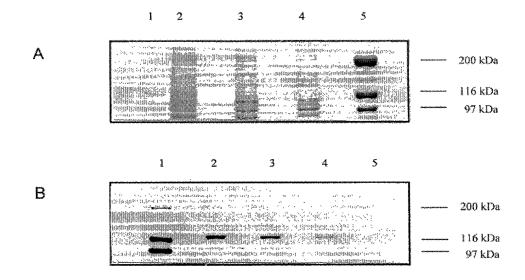
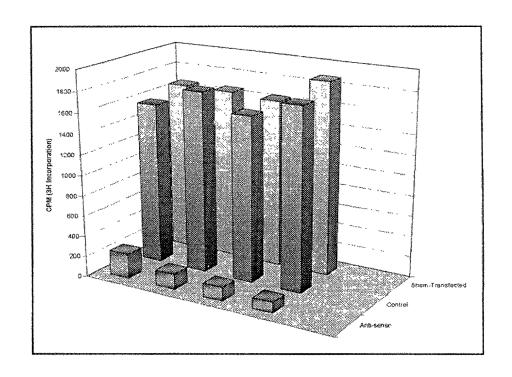


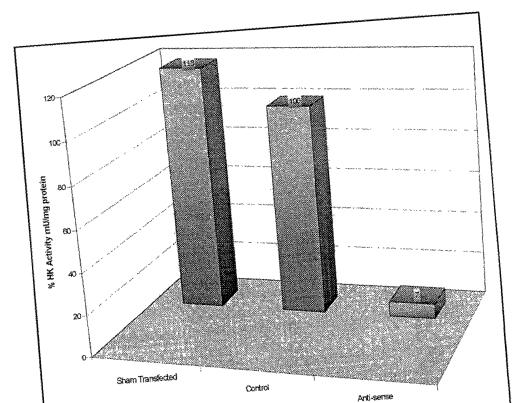
917 mutant type II Legend: - protein Sequence: 1 MIASHMIACL FTELNONQVQ KVDQFLYHMR LSDETLLEIS RRFRKEMEKG LGATTHPTAĄ 61 VKMLPTFVRS TPDGTEHGEF LALDLGGTNF RVLRVRVTDN GLQRVEMENQ IYAILEDIMR 121 GSGTQLFDHI AECLANFMDK LQIKEKKLPL GFTFSFPCHQ TKLDESFLVS WTKGFKSSGV 181 EGRDVVDLIR KVIQRRGDFD IDIVAVVNDT VGTMMTCGYD DQNCEIGLIV GTGSNACYME 241 EMRHIDMVEG DEGRMCINME UGAFGDDGTL NDIRTEFDRE IDMGSLNPGK QLFEKMISGM 301 YMGELVRLIL VKMAKAELLF QGKLSPELLT TGSFETKDVS DIEEDKDGIE KAYQILMRLÇ 361 LNPLQEDOVA THRICQIVST RSASLCAATL AAVLWRIKEN KGEERLRSTI GVDGSVYKKH 421 PHFAKRLHKA VRRLVPDCDV RFLRSEDGSG KGAAMVTAVA YRLADQHRAR QKTLESLKLŞ 481 HEQLLEVKRR MKVEMEQGLS KETHAVAPVK MLPTYVCATP DGTEKGDFLA LDLGGTNFRY 541 LLVRVRNGKR RGVEMHNKIY SIPQEVMHGT GEELFDHIVQ CIADFLEYMG MKGVSLPLGF 601 TFSFPCQQNS LDQSILLKWT KGFKASGCEG EDVVTLLKEA IHRREEFDLD VVAVVNDTVÇ 661 TMMTCGYEDP HCEVGLIVGT GSNACYMEEM RNVELVDGEE GRMCVNMENG AFGDNGCLDD 721 LRTVFDVAVD ELSLNPCKQR FEKMISCMYL CEIVRNILID FTKRCLLFRC RISERLKTRC 781 ISETKFLSQI ESDCLALLQV RAILRHLGLE STCDDSIIVK EVCTVVARRA AQLCGAGMAA

841 VVDKIRENRG LDNPKVTVGV DGTLYKLHPH FAKVMHETVR DLAPKCDVSF LESEDGSGKG

901 AALITAVACR IREAGQR







AF027179 Rattus norvegicus mutant type II hexokinase mRNA, complete cds

	aggatataat	accetactta	ttaaaaaaa	traarraasa	ccaadtacaa	61
argaregeer	cgcatatgat	ccacatacat	ctctcacata	tcaaccaaaa agacccttct	ggagatttct	121
aaggergace	aacccccca	adadaaaaaa	ctaggacg	ccacgcaccc	tacagcagct	1.81.
aggeggetee	tagatagatt	tataaaataa	actecogato	ggacagaaca	tagggagttc	241
gradaargr	atattagaga	aaccaacttc	catatactca	gagtaagggt	gacggacaat	301
acastagas	accicggagg	aaccaactec	atctaccca	tccttgagge	catcatacaa	361
ggeeteeaga	gaguggagau	ggagaaccag	acctacycca	tccttgagga	catcacacaa	421
ggcagtggaa	cccagcigii	rgaccacatc	getgaatget	tggccaactt	ctacagacaag	481
Ctacaaatca	aagagaagaa	tttaatataa	tagagtaaga	tctcgttccc	cagtagagata	541
acaaaactgg	atgagagttt	actactaca	rggactaagg	ggttcaagtc	caguagegeg	601
gaaggcagag	argrayraga	cetgateegg	aaggccaccc	agcgcagagg	tagatataat	661
attgacattg	tggeegtggt	gaacgacaca	grtgggacca	tgatgacttg	ctactacac	721
gatcagaact	gcgagattgg	teteattgtg	ggcactggca	gcaacgcctg	ccacatggag	701
gaaatgcgtc	atattgacat	ggtggaggga	gatgagggg	gcatgtgcat	tanagagaga	0/1
tggggagcct	ttggggacga	eggtacacte	aatgacatee	gaaccgagtt	tgaccgagag	001
atcgacatgg	gctcgctgaa	ccctgggaag	cagetgtttg	agaagatgat	ragegggatg	901
tacatggggg	agctggtcag	gctcatcctg	gtgaagatgg	ccaaggcaga	getgttgtte	1001
caagggaaac	tcagcccaga	actccttacc	actggctcct	tcgagaccaa	agatgteteg	1021
gatattgaag	aggataagga	tggaatcgag	aaggcctacc	aaatcctgat	gegeetgggt	1001
ctgaatccat	tgcaggagga	ttgtgtggcc	acgcaccgaa	tctgccagat	tgtgtccacg	1141
cgctcggcca	gtctgtgcgc	agccaccctg	gccgcggtgc	tgtggcgaat	caaagagaac	1201
aagggcgagg	agcgacttcg	ctccaccatc	ggtgtcgatg	gctccgtcta	caagaaacat	1261
ccccattttg	ccaagcgtct	ccataaggca	gtgaggaggc	tggtgcccga	ctgtgatgtc	1321
cgcttcctcc	gctctgagga	tggcagcggc	aagggggctg	ctatggtgac	ggcggtggct	1381
taccgtctgg	ctgaccaaca	ccgggcccgc	cagaagaccc	tggagtctct	gaagctgagc	1441
cacgagcagc	ttctggaggt	taagagaaga	atgaaggtgg	aaatggagca	gggtctgagc	1501
aaggagacgc	atgcggtcgc	ccctgtgaag	atgctgccca	cttacgtgtg	tgccactcca	1561
gatggcacag	agaaaggaga	cttcttggcc	ttggatcttg	gaggaacaaa	cttccgggtc	1621
ctgctggtgc	gtgtgcgtaa	tggcaagcgg	aggggcgtgg	agatgcataa	caagatctac	1681
tccatcccac	aggaggttat	gcatggcact	ggggaagagc	tcttcgacca	cattgtccag	1741
tgcattgcgg	acttcctgga	gtacatgggc	atgaagggcg	tgtccctgcc	tttgggtttc	1801
acattctcct	tcccttgcca	gcagaacagc	ctagaccaga	gcatcctcct	caagtggaca	1861
aagggattca	aggcatctgg	ctgcgagggt	gaggatgtgg	tcaccttgct	gaaggaagcg	1921
attcaccggc	gagaggagtt	tgacctggat	gtggttgccg	tggtgaatga	cacagttggg	1981
actatgatga	cttgtggcta	cgaagaccct	cactgtgaag	ttggcctcat	tgttggcacc	2041
ggaagcaacg	cctgctacat	ggaagagatg	cgtaatgtgg	agctggtgga	cggagaggag	2101
ggacggatgt	gtgtcaacat	ggagtgggga	gcatttgggg	acaatggctg	cctggatgac	2161
ttgcggaccg	tgtttgatgt	tgctgtggat	gagctttctc	tcaaccctgg	caaacagagg	2221
ttcgagaaga	tgatcagcgg	catgtacttg	ggagagattg	tgcgcaacat	tctcatcgat	2281
ttcacgaagc	gggggctgct	cttccgaggc	cgcatctcag	agcgcctcaa	gacaagggga	2341
atctctgaaa	ctaagttcct	gtctcagata	gagagcgact	gcctagccct	gctacaggtt	2401
cgtgccatcc	tgcgccacct	agggctggag	agcacgtgcg	atgacagcat	catcgtgaag	2461
gaggtgtgca	ctgtggttgc	ccggcgcgct	gcacagctct	gtggcgcagg	catggccgcc	2521
gtagtggaca	agataagaga	gaaccgtggg	ctggacaacc	ccaaagtgac	agtgggcgtg	2581
gacgggactc	tgtataagct	tcatcctcac	tttgccaagg	tcatgcatga	gacggtgaga	2641
gatctggctc	cgaaatgtga	cgtgtccttc	ctggaatccg	aggacggcag	tgggaaggga	2701
gcagctctca	tcactgccgt	ggcctgccgc	atccgggagg	ctgggcagag	atag	
-		- -				

FIGURE 7A

AF113968 Cloning vector pLXRN, complete sequence

gaattgctag	caattgctag	caattgctag	caattcatac	cagatcaccg	aaaactgtcc	61
tccaaatgtg	tcccctcac	actcccaaat	tcgcgggctt	ctgcctctta	gaccactcta	121
ccctattccc	cacactcacc	ggagccaaag	ccgcggccct	tccgtttctt	tgcttttgaa	181
agaccccacc	cgtaggtggc	aagctagctt	aagtaacgcc	actttgcaag	gcatggaaaa	241
atacataact	gagaatagaa	aagttcagat	caaggtcagg	aacaaagaaa	cagctgaata	301
ccaaacagga	tatctgtggt	aagcggttcc	tgccccggct	cagggccaag	aacagatgag	361
acagctgagt	gatgggccaa	acaggatatc	tgtggtaagc	agttcctgcc	ccggctcggg	421
gccaagaaca	gatggtcccc	agatgcggtc	cagccctcag	cagtttctag	tgaatcatca	481
gatgtttcca	gggtgcccca	aggacctgaa	aatgaccctg	taccttattt	gaactaacca	541
atcagttcgc	ttctcgcttc	tgttcgcgcg	cttccgctct	ccgagctcaa	taaaagagcc	601
cacaacccct	cactcggcgc	gccagtcttc	cgatagactg	cgtcgcccgg	gtacccgtat	661
tcccaataaa	gcctcttgct	gtttgcatcc	gaatcgtggt	ctcgctgttc	cttgggaggg	721
tctcctctga	gtgattgact	acccacgacg	ggggtctttc	atttgggggc	tcgtccggga	781
tttggagacc	cctgcccagg	gaccaccgac	ccaccaccgg	gaggtaagct	ggccagcaac	841
ttatctgtgt	ctgtccgatt	gtctagtgtc	tatgtttgat	gttatgcgcc	tgcgtctgta	901
ctagttagct	aactagctct	gtatctggcg	gacccgtggt	ggaactgacg	agttctgaac	961
acccggccgc	aaccctggga	gacgtcccag	ggactttggg	ggccgttttt	gtggcccgac	1021
ctgaggaagg	gagtcgatgt	ggaatccgac	cccgtcagga	tatgtggttc	tggtaggaga	1081
cgagaaccta	aaacagttcc	cgcctccgtc	tgaatttttg	ctttcggttt	ggaaccgaag	1141
ccgcgcgtct	tgtctgctgc	agcgctgcag	catcgttctg	tgttgtctct	gtctgactgt	1201
gtttctgtat	ttgtctgaaa	attagggcca	gactgttacc	actcccttaa	gtttgacctt	1261
aggtcactgg	aaagatgtcg	agcggatcgc	tcacaaccag	tcggtagatg	tcaagaagag	1321
acgttgggtt	accttctgct	ctgcagaatg	gccaaccttt	aacgtcggat	ggccgcgaga	1381
cggcaccttt	aaccgagacc	tcatcaccca	ggttaagatc	aaggtctttt	cacctggccc	1441
gcatggacac	ccagaccagg	tcccctacat	cgtgacctgg	gaagccttgg	cttttgaccc	1501
ccctccctgg	gtcaagccct	ttgtacaccc	taagcctccg	cctcctctc	ctccatccgc	1561
cccgtctctc	ccccttgaac	ctcctcgttc	gaccccgcct	cgatcctccc	tttatccagc	1621
cctcactcct	tctctaggcg	ccggaattcg	ttaactcgag	gatccactag	taacggccgc	1681
cagtgtgctg	gaattaattc	gctgtctgcg	agggccggct	gttggggtga	gtactccctc	1741
tcaaaagcgg	gcatgacttc	tgcgctaaga	ttgtcagttt	ccaaaaacga	ggaggatttg	1801
atattcacct	ggcccgcggt	gatgcctttg	agggtggccg	cgtccatctg	gtcagaaaag	1861
acaatctttt	tgttgtcaag	cttgaggtgt	ggcaggcttg	agatctggcc	atacacttga	1921
gtgacaatga	catccacttt	gcctttctct	ccacaggtgt	ccactcccag	gtccaactgc	1981
aggtcgatcg	agcatgcatc	tagggcggcc	aattcgcccc	tctccctccc	cccccctaa	2041
cgttactggc	cgaagccgct	tggaataagg	ccggtgtgtg	tttgtctata	tgtgattttc	2101
caccatattg	ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	2161
gagcattcct	aggggtcttt	cccctctcgc	caaaggaatg	caaggtctgt	tgaatgtcgt	2221
gaaggaagca	gttcctctgg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	2281
caggcagcgg	aaccccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	2341
agatacacct	gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	2401
aagagtcaaa	tggctctcct	caagcgtagt	caacaagggg	ctgaaggatg	cccagaaggt	2461
accccattgt	atgggaatct	gatctggggc	ctcggtgcac	atgctttaca	tgtgtttagt	2521
cgaggttaaa	aaagctctag	gccccccgaa	ccacggggac	gtggttttcc	tttgaaaaac	2581
acgatgataa	gcttgccaca	accccgggat	aattcctgca	gccaatatgg	gatcggccat	2641
tgaacaagat	ggattgcacg	caggttctcc	ggccgcttgg	gtggagaggc	tattcggcta	2701
					tgtcagcgca	
ggggcgcccg	gttctttttg	tcaagaccga	cctgtccggt	gccctgaatg	aactgcagga	2821
cgaggcagcg	cggctatcgt	ggctggccac	gacgggcgtt	ccttgcgcag	ctgtgctcga	2881
					ggcaggatct	
					caatgcggcg	
gctgcatacg	cttgatccgg	ctacctgccc	attcgaccac	caagcgaaac	atcgcatcga	3061
gcgagcacgt	actcggatgg	aagccggtct	tgtcgatcag	gatgatctgg	acgaagagca	3121
tcaggggctc	gcgccagccg	aactgttcgc	caggctcaag	gcgcgcatgc	ccgacggcga	3181
ggatctcgtc	gtgacccatg	gcgatgcctg	cttgccgaat	atcatggtgg	aaaatggccg	3241

FIGURE 7B

				~~~~~		2201
cttttctgga	ttcatcgact	grggccggcr	gggtgtggcg	gacegerare	aggacatagc	2201
gttggctacc	cgtgatattg	ctgaagagct	tggcggcgaa	tgggctgacc	gcttcctcgt	336I
gctttacggt	atcgccgctc	ccgattcgca	gcgcatcgcc	ttctatcgcc	ttcttgacga	3421
gttcttctga	gcgggactct	ggggttcgat	aaaataaaag	attttattta	gtctccagaa	3481
aaaqqqqqqa	atgaaagacc	ccacctqtaq	gtttggcaag	ctagcttaag	taacgccatt	3541
ttgcaaggca	togaaaaata	cataactgag	aatagagaag	ttcagatcaa	ggtcaggaac	3601
acatacaaca	actasetata	aaccasacsa	gatatctgtg	gtaagcagtt	cctgccccgg	3661
atasaaaaa	agaagaata	gaacaactaa	atatorogra	aacaccatat	ctgtggtaag	3721
cccayggcca	agaacagacg	gaacagccga	acatgggcca	cacatacaat	ccaccctca	3781
cagtteetige	eeeggereag	ggccaagaac	agatggtttt	cagacgcggc	ccagccctca	2041
gcagtttcta	gagaaccatc	agatgtttcc	agggtgeeee	aaggacctga	aatgaccctg	3041
tgccttattt	gaactaacca	atcagttcgc	ttctcgcttc	tgttcgcgcg	cttctgctcc	3901
ccgagctcaa	taaaagagcc	cacaacccct	cactcggggc	gccagtcctc	cgattgactg	3961
agtcgcccgg	gtacccgtgt	atccaataaa	ccctcttgca	gttgcatccg	acttgtggtc	4021
tcgctgttcc	ttgggagggt	ctcctctgag	tgattgacta	cccgtcagcg	ggggtctttc	4081
atttgggggc	tcgtccggga	tcgggagacc	cctgcccagg	gaccaccgac	ccaccaccgg	4141
gaggtaagct	aactacctca	cacatttcaa	tgatgacggt	gaaaacctct	gacacatgca	4201
gctcccggag	accotcacac	cttatctata	agcggatgcc	gggagcagac	aagcccgtca	4261
gaacacatca	acadatatta	acadatatca	adacacaacc	atgacccagt	cacgtagcga	4321
taggggggggata	tatactccct	taactatoco	gggcgcagcc	agattotagt	gagagtgcac	4381
tageggageg	cacactggct	agagagatag	gtaccagage	agaccgcacc	gagagagatat	1111
catatgeggt	grgaaaracc	gcacagatgc	graaggagaa	aataccycat	caggcgctct	4501
teegetteet	cgctcactga	ctcgctgcgc	teggtegtte	ggetgeggeg	agcggtatca	4501
gctcactcaa	aggcggtaat	acggttatcc	acagaatcag	gggataacgc	aggaaagaac	4561
atgtgagcaa	aaggccagca	aaaggccagg	aaccgtaaaa	aggccgcgtt	gctggcgttt	4621
ttccataggc	tccgcccccc	tgacgagcat	cacaaaaatc	gacgctcaag	tcagaggtgg	4681
cgaaacccga	caggactata	aagataccag	gcgtttcccc	ctggaagctc	cctcgtgcgc	4741
tctcctgttc	cgaccctgcc	gcttaccgga	tacctgtccg	cctttctccc	ttcgggaagc	4801
qtqqcqcttt	ctcatagctc	acgctgtagg	tatctcagtt	cggtgtaggt	cgttcgctcc	4861
aagctgggct	atatacacaa	accccccqtt	caqcccqacc	gctgcgcctt	atccggtaac	4921
tatcototto	agtccaaccc	ggtaagacac	gacttatcgc	cactggcagc	agccactggt	4981
aacaddatta	acadadcdad	gtatgtaggc	ggtgctacag	agttcttgaa	gtggtggcct	5041
aacaggacca	acactacaac	geacgeagge	ggtgtttata	ctctgctgaa	gccagttacc	5101
ttaggaaaaa	acactagaag	gacageacee	ggcacccgcg	ccaccactaa	tagcggtggt	5161
tttttgtt	gcaagcagca	gattacgcgc	agaaaaaaag	gattttaaga	agatcctttg	522I
					gattttggtc	
atgagattat	caaaaaggat	cttcacctag	atccttttaa	attaaaaatg	aagttttaaa	5341
tcaatctaaa	gtatatatga	gtaaacttgg	tctgacagtt	accaatgctt	aatcagtgag	5401
gcacctatct	cagcgatctg	tctatttcgt	tcatccatag	ttgcctgact	ccccgtcgtg	5461
tagataacta	cgatacggga	gggcttacca	tctggcccca	gtgctgcaat	gataccgcga	5521
					aagggccgag	
cqcaqaaqtq	gtcctgcaac	tttatccgcc	tccatccagt	ctattaattg	ttgccgggaa	5641
					tgctgcaggc	
atcataatat	cacactcatc	gtttggtatg	gcttcattca	actccaattc	ccaacgatca	5761
adddaatta	catdatcccc	catattatas	aaaaaaaaaaa	ttagctcctt	cggtcctccg	5821
atcottotos	gaagtaagtt	aaccacaata	ttatcactca	taattataac	agcactgcat	5881
accyctytta	gaagcaagct	ataataaa	taattatta	taaataataa	gtactgeac	5041
aducticuta	cegecatyce	accograaga	aggrettest	attacasas	gtactcaacc	2741
aagtcattct	gagaatagtg	Latgeggega	ccgagttgct	erraceegge	gtcaacacgg	900I
gataataccg	cgccacatag	cagaacttta	aaagtgctca	tcattggaaa	acgttcttcg	

## FIGURE 7C

6061	gggcgaaaac	tctcaaggat	cttaccgctg	ttgagatcca	gttcgatgta	acccactcgt
						agcaaaaaca
						aatactcata
6241	ctcttccttt	ttcaatatta	ttgaagcatt	tatcagggtt	attgtctcat	gagcggatac
6301	atatttgaat	gtatttagaa	aaataaacaa	ataggggttc	cgcgcacatt	tccccgaaaa
6361	gtgccacctg	acgtctaaga	aaccattatt	atcatgacat	taacctataa	aaataggcgt
6421	atcacgagge	cettteatet	tcaa			

#### FIGURE 8A

#### Accession Number NM_012734 for Rattus norvegicus Hexokinase 1 (Hk1), mRNA

```
cgccgatctg ccgctggagg accactgctc accagggcta ctgaggagcc actggcccca 61
cacctgcttt teegeateee ceacegteag catgategee gegeaactae tggeetatta 121
cttcaccqaq ctqaaqqatg accaagtcaa aaagattgac aagtatctgt acgccatgcg 181
qctctctqat gagattctga tagatatcct gacacgattc aagaaagaga tgaagaatgg 241
cctctcccqq qattataatc caacaqcctc cqtcaagatg ctgcccacct tcgtccggtc 301
cattccggac ggctcagaaa agggggattt cattgccctg gatctcggcg ggtcttcctt 361
tcgaatcctg cgggtgcagg tgaaccacga gaagaaccag aacgtcagca tggagtctga 421
gatctacgac accccagaga acatcgtgca tggcagtgga acccagcttt tcgatcatgt 481
cgctgactgc ctgggagact tcatggagaa aaagaagatc aaggacaaga aqttacccgt 541
gggattcaca ttttccttcc cctgccgaca atccaagata gatgaggctg tactgatcac 601
gtggacaaag cggttcaaag ccagtggcgt ggaaggagcg gatgtggtca agttgctgaa 661
taaagccatt aagaagcgag gggactatga tgctaacatt gtcgccgtgg tgaatgacac 721
agtagggacc atgatgacct gcggttatga tgaccaacag tgtgaagtcg gcctgatcat 781
tggcacaggc accaatgctt gctacatgga ggaactgcga cacatcgacc tggtggaagg 841
cgacgagggg aggatgtgta ttaacacgga atggggagcc tttgggggatg atgggtccct 901
ggaagacatc cgaaccgagt ttgacagaga gttagaccgt ggatctctca accctgggaa 961
gcagctgttc gagaagatgg tgagcggcat gtacatgggg gagctggtcc ggctaatcct 1021
ggtgaagatg gccaaggaag gcctcttatt cgaagggcgc atcactccag agctgctcac 1081
gaggggaaag ttcaacacta gtgacgtgtc cgccattgaa aaggataagg aaggcattca 1141
aaatgccaag gaaatcttaa cccgcttggg agtggagccg tctgatgttg actgtgtgtc 1201
ggtccagcac atctgcacga tcgtctcctt ccgatcagcc aacctggtgg ccgccacgct 1261
cggtgccatc ttgaaccgcc tgcgggacaa caagggcaca ccacgcctgc ggaccacggt 1321
tggcgtggac ggttctctct acaagatgca cccacagtac tcccggcggt tccacaagac 1381
cctgaggcgc ctggtgcctg actccgacgt ccgtttcctc ctctcagaga gtggcacggg 1441
caagggggcc gccatggtga cggcagtagc ctaccgcctg gctgagcagc accggcagat 1501
tgaggaaacc ctggcccact tccgcctcag caagcagacg ctgatggagg tgaagaagag 1561
gctacggaca gagatggaaa tggggctgag gaaggagacc aacagcaaag ctactgtcaa 1621
aatgctgcct tcttttgtcc ggagcatccc ggatgggact gaacacggtg acttcctggc 1681
cttggatctt ggaggaacga atttccgggt tctgctggta aagatccgca gtgggaaaaa 1741
gagaacagtg gaaatgcaca acaagatcta ctccattccc ctggaaatca tgcagggcac 1801
cggggatgag ctgtttgacc acatcgtctc ctgcatctct gacttcctgg actacatggg 1861
gatcaaaggc ccccggatgc ctctgggctt caccttctca tttccctgcc atcagacgaa 1921
cctggactgt ggaatcttga tctcatggac aaagggtttc aaagccactg actgtgaggg 1981
ccatgatgta gcctccttac tgagggatgc ggtgaagagg agagaggaat ttgacttgga 2041
tgtggtggct gtggtcaacg acaccgtggg caccatgatg acctgtgcgt atgaagaacc 2101
cacttgcgaa attggactca tcgtggggac gggcaccaat gcctgctaca tggaggagat 2161
qaaqaatgtg gagatggtgg aggggaacca gggccagatg tgcatcaaca tggagtgggg 2221
cqccttcqqt qacaatqqgt gtctggatga catcagaaca gactttgaca aagtggtgga 2281
cgaatattct ctaaactctg ggaaacaaag gtttgagaaa atgatcagtg ggatgtacct 2341
gggtgagatc gtccgtaaca tcctgattga cttcaccaag aaaggcttcc tcttccgggg 2401
acagatetee gaaccaetea agaccegagg catetttgag accaagttte teteteagat 2461
tgagagtgac cggttagcgc tgctccaggt gcgggccatc cttcagcagc tgggtttgaa 2521
cagcacgtgt gacgacagta tcctggtcaa gaccgtgtgt ggggtggtgt ccaagagggc 2581
ggctcagctg tgtggtgccg gcatggccgc cgtggtggaa aagatcagag agaacagagg 2641
cctagaccat ctgaatgtaa ctgtgggagt ggatgggacg ctctacaaac ttcatccaca 2701
cttctccaga atcatgcacc aaactgtgaa ggaactgtca ccaaagtgta ccgtgtcctt 2761
cctcctgtct gaagacggca gcggcaaggg ggccgccctt atcacagctg tgggcgtgcg 2821
gctcagagga gaccettega tegectaaaa gccaggatee teecageeec cageeegeca 2881
cccttccagc actcctctct agaaccgacg accacaccc cgtgttccac ccagcaagcc 2941
ctgggagacc cagccagcgc ccactccgcc gcagcagagg gaggaagggg accgcagtaa 3001
cggagcacca cgtagaatac cacccagagc gcgtgtgctg ttgatctgat ctctcgcctg 3061
gacccctaat ccctqcctq ccactctqca tqattcaaqt tcqacctqqc catgcattgc 3121
```

## FIGURE 8B

ccatgagtga	acgtagcggc	accccggtgc	gtctactgca	gatgtccagc	taggaaagag	3181
tcccctctct	tggacagtct	tctgggccct	tccaagccca	tccgtggagt	cggcctctcc	3241
tcccctctcc	cccgtgtgaa	gtgtgttatc	accagcagac	actgccggac	tcctgcccac	3301
aggggcgtgg	cctgaaggcg	gagtgtggac	atggcactgc	tgttccgttc	ccttcccctc	3361
ccagcacccg	ccgcagcctg	ccatcccgtc	tggatgtatc	gatgccacag	aattgtgaat	3421
tgtgtgtccg	tccgtggagc	cagtcctagc	cacattattg	acagtcttgc	attttgtttt	3481
gtctcctggt	ggtgggggtg	gaggtggtag	gggtgcgcta	aggtgggcag	tcctgtggga	3541
gaacatcttg	ctagaaggaa	ccaacccacg	aaacaacacc	atcactggaa	tttccatcgc	3601
ccgaattctt	tagtgaggga	ttattataca	totagtagac	tttgtactga	ttc	